Listing of Claims

- 1. (Original) An isolated nucleic acid comprising a transcriptional unit encoding a signal sequence of a structural protein of a first flavivirus and an immunogenic flavivirus antigen of a second flavivirus, wherein the transcriptional unit directs the synthesis of the antigen.
- 2. (Original) The nucleic acid of claim 1, wherein the signal sequence is a Japanese encephalitis virus signal sequence.
- 3. (Original) The nucleic acid of claim 1, wherein the immunogenic flavivirus antigen is of a flavivirus selected from the group consisting of yellow fever virus, dengue serotype 1 virus, dengue serotype 2 virus, dengue serotype 3 virus, dengue serotype 4 virus, Japanese encephalitis virus, Powassan virus and West Nile virus.
- 4. (Original) The nucleic acid of claim 1, wherein the transcriptional unit encodes a signal sequence of Japanese encephalitis virus and an M protein and an E protein of West Nile virus.
- 5. (Original) The nucleic acid of claim 1, wherein the transcriptional unit encodes a signal sequence of Japanese encephalitis virus and an M protein and an E protein of yellow fever virus.
- 6. (Original) The nucleic acid of claim 1, wherein the transcriptional unit encodes a signal sequence of Japanese encephalitis virus and an M protein and an E protein of St. Louis encephalitis virus.
- 7. (Original) The nucleic acid of claim 1, wherein the transcriptional unit encodes a signal sequence of Japanese encephalitis virus and an M protein and an E protein of Powassan virus.

- 8. (Original) The nucleic acid of claim 1, wherein the antigen is selected from the group consisting of an M protein of a flavivirus, an E protein of a flavivirus, both an M protein and an E protein of a flavivirus, a portion of an M protein of a flavivirus, a portion of an E protein of a flavivirus and both a portion of an M protein of a flavivirus and a portion of an E protein of a flavivirus or any combination thereof.
- 9. (Original) The nucleic acid of claim 8, wherein the antigen is both the M protein and the E protein of a flavivirus.
 - 10. (Original) The nucleic acid of claim 1, wherein the nucleic acid is DNA.
- 11. (Original) The nucleic acid of claim 10, comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:15, SEQ ID NO:19, SEQ ID NO:21 and SEQ ID NO:23.
- 12. (Original) The nucleic acid of claim 1, wherein the transcriptional unit comprises a control sequence disposed appropriately such that it operably controls the synthesis of the antigen.
- 13. (Original) The nucleic acid of claim 12, wherein the control sequence is the cytomegalovirus immediate early promoter.
- 14. (Original) The nucleic acid of claim 1, comprising a Kozak consensus sequence located at a translational start site for a polypeptide comprising the antigen encoded by the TU.
- 15. (Original) The nucleic acid of claim 1 wherein the transcriptional unit comprises a poly-A terminator.
 - 16. (Original) A cell comprising the nucleic acid of claim 1.

- 17. (Original) A composition comprising the nucleic acid of claim 1 and a pharmaceutically acceptable carrier.
 - 18. through 27. (Cancelled)
- 28. (Original) The nucleic acid of claim 1, wherein the antigen is a St. Louis encephalitis virus antigen.
- 29. (Original) The method of claim 18, wherein the antigen is a St. Louis encephalitis virus antigen.
- 30. (Original) The nucleic acid of claim 1, wherein the antigen is a Japanese encephalitis virus antigen.
- 31. (Original) The method of claim 18, wherein the antigen is a Japanese encephalitis virus antigen.
- 32. (Original) The nucleic acid of claim 1, wherein the antigen is a yellow fever virus antigen.
- 33. (Original) The method of claim 18, wherein the antigen is a yellow fever virus antigen.
- 34. (Original) The nucleic acid of claim 1, wherein the antigen is a dengue virus antigen.
- 35. (Original) The method of claim 18, wherein the antigen is a dengue virus antigen.

- 36. (Original) The nucleic acid of claim 1, wherein the antigen is a West Nile virus antigen.
- 37. (Original) The method of claim 18, wherein the antigen is a West Nile virus antigen.
 - 38. through 43. (Cancelled)